MIC-78MG30

GPU Expansion Module for High-Performance Edge AI Computing with MIC-78 Series

Features

- Built for next-generation computing, supporting PCIe Gen5 GPU cards with up to a 3-slot design, optimized for dual-fan GPU designs
- Offering powerful GPU solution with NVIDIA 250W, 3-slot width, 290mm length GPU cards for AI and edge computing applications
- Flexible GPU card holders ensuring GPU card's stability and reliability
- Supports up to 1 Grms operational vibration, ensuring system stability in harsh environments
- Support up to 35°C Op. temp. with 250W GPU card installed with PWM fan control for intelligent thermal management
- Dual front-accessible 2.5" storage bays, enabling easy maintenance
- IP30 rating with fan filter, suitable for outdoor or industrial environment
- Compact size design

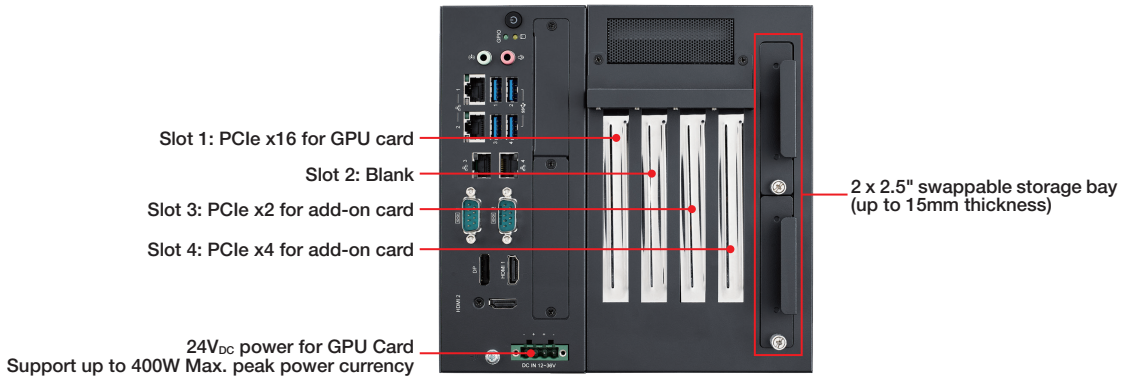
Introduction

MIC-78MG30 supports NVIDIA 3-slot width high performance 250W dual fan based cards. Robust power design ensures MIC-78 systems and GPU card's reliability under high power consumption application. Ideal for High-Performance Edge AI computing, 3D image processing and vision application.

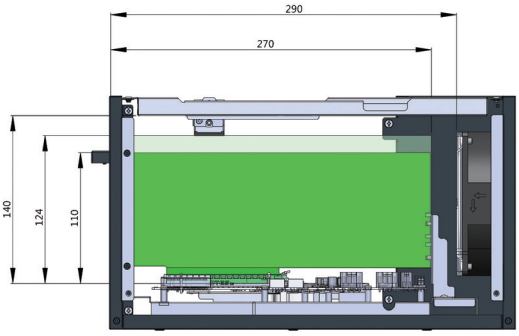
Specification

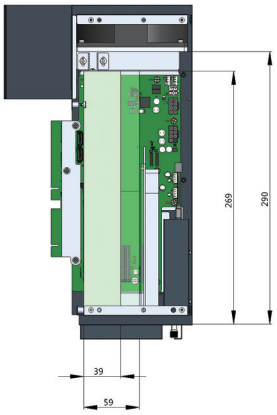
Expansion slot	Slot 1: PCIe x16, Slot 2: Blank, Slot 3: PCIe x2, Slot 4: PCIe x4
SATA Connector	2 x SATA Signal, 2 x SATA Power
Storage	2 x 2.5" swappable HDD/SSD storage bay
Power	Input: 24 V_{DC} (On MIC-78 series system)
	Power consumption: Max. Load: 448W (tested with 250W GPU and MIC-780 system with 35W CPU)
	Power solution supports up to maximum 400W (Tested with 250W GPU card's peak power consumption)
	2 x 8-pin Conn. for GPU card (12V_{DC}, 36A for each Conn.)
	1 x 4-pin Conn. for add-on card (12V_{DC}, 5A)
GPU Card Dimension	Thickness: 59 mm (3-slot width), Length: 290 mm, Height: 124 mm Support dual fan GPU cards
Enviroment	Operating Temp.: -20~35 °C (65W CPU w/ industrial wide-temp. RAM/SSD)
	Vibration: With SSD: 1 Grms @ 5~500 Hz, randon, 1 hr/axis
	Shock: With SSD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration
Mechanical	MIC-78MG30 N.W. 3 kg; G.W.: 4.5 kg
	Dimension (W x H x D): 200 x 195 x 300 mm
Fan	1x 12038 cooling fan embedded (8300 RPM, 238 CFM, Max. 79.3 dB)

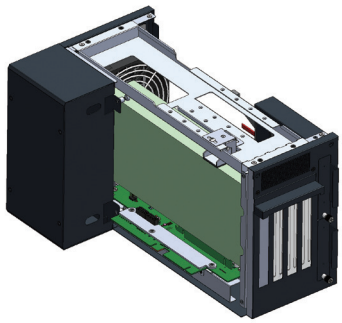
Front View



GPU Card Dimension Guide







Ordering Information

Part Number	Description
MIC-78MG30-00A1	MIC-78 GPU i-Module with 1 PCIe x16, 1 x PCIe x2, 1x PCIe x4, 2x 2.5" swappable storage bay

Packing List

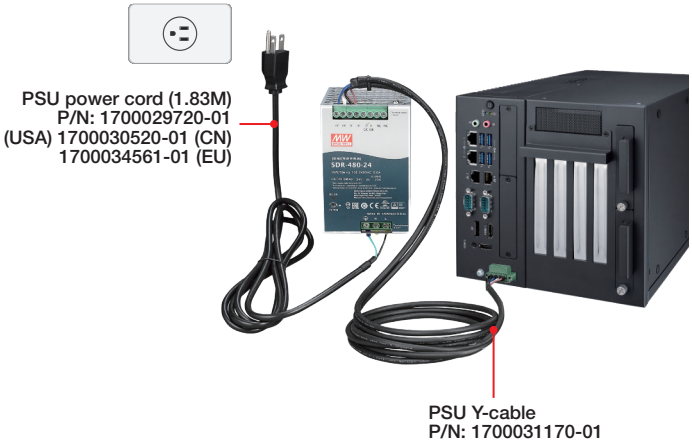
Part Number	Description	Quantity
1652003234	4-pin phoenix connector	2
1700036470-01	SATA cable (30cm)	2
1700024985-01	HDD BP power cable	1
1700034485-01	GPU power cable (6 to 6/8 Pin)	2
1960005359T00A	Mounting bracket (Left)	1
1960094392N101	Mounting bracket (Right)	1
1930007259-01	Screw for mounting bracket	4

Optional Accessories

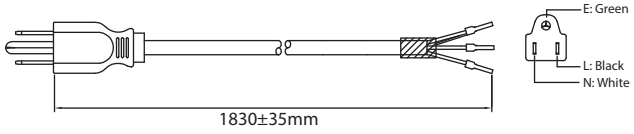
Part Number	Description
96PSD-A480W24-MS*	DIN RAIL PSU 100-240V 480W 24V (Peak power 720W, 3 Sec.)
1700031170-01	DC-DC power cord, A cable TEM*4/TEM*4 UL2464 18AWG 150cm
1700029720-01	PSU power cord (USA), AC Conn., 3-pin, 10A, 125V, UL/CSA, 1.83M
1700030520-01	PSU power cord (CN), AC Conn., 3-pin, 10A, 250V, CCC, 1.5M
1700034561-01	M cable Type E 3P/TEMx3 80CM (EU)
1700022074-11	4-pin $12V_{DC}$ power cable (40cm, for PoE card)

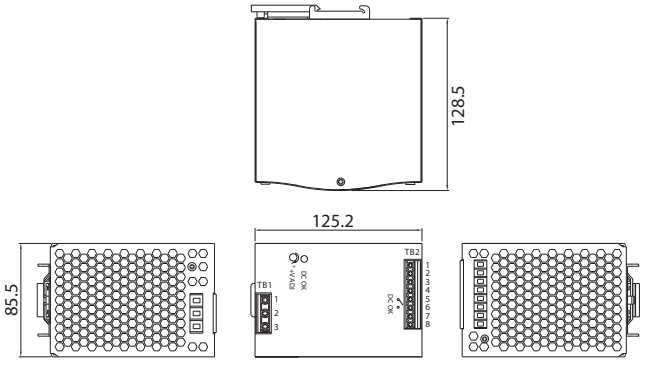
* Recommend to use for powering MIC-75G20 + MIC-7000.

Power Supply Cabling Guide



PSU power cord & Pin Definition (connect from AC to DC)





TB2 pin-out (connect from PSU DC to MIC)

Pin No.	Assignment
1, 2	DC OUTPUT+V
3, 4	DC OUTPUT-V
5, 6	Relay Contact
7, 8	NC

TB1 pin-out (connect from AC to PSU)

Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

Y type cable

Connect from PSU to the MIC-7000 and MIC-75G20 via optional PSU Y-cable with 2x 4-pin phoenix connector (1652003234)

Mounting Type and Dimensions

Unit: mm

Example: MIC-780 + MIC-78MG30
W x H x D: 200 x 195 x 340 mm